

## **Vektron® 1200**

Vektron 1200 is a high molecular weight polymer with low water solubility used in gasoline additives at low treat rates. Vektron 1200 is used in Vektron 6913, Infineum's emissions reduction gasoline additive technology. It serves as a carrier fluid in addition to providing the NOx reduction capability of the Vektron 6913 additive package.

Vektron 1200 will not have the ground water impact of the MTBE currently blended into gasoline. MTBE is an ether of low molecular weight with high water solubility used as a gasoline oxygenate and blended at high concentrations. The solubility of Vektron 1200 in water is 50 ppmw while the solubility of MTBE in water is 48,000 ppmw ==> MTBE is ~1000 times more soluble in water than Vektron 1200. Additionally, stability testing has demonstrated that Vektron 1200 is highly sorptive onto surfaces. If, under an exposure-release scenario in the environment, Vektron 1200 would be spilled onto soil, it would be sorbed and would not easily reach an aquifer or source receiving water. If Vektron 1200 were spilled into a waterway, there would be initial sorption and then a diminishing concentration with dilution and depletion of the spill.

In terms of treat rate in gasoline, MTBE is added at 10 - 17% while Vektron 1200 is typically added at 300 ppmw ==> MTBE concentration in gasoline is ~ 500 times higher than Vektron 1200.

	<b><u>Vektron 1200</u></b>	<b><u>MTBE</u></b>
Function	Gasoline Additive	Gasoline Blend Component (Oxygenate)
Chemical	High MW Polymer	Ether
Solubility in Water	50 ppmw	48,000 ppmw
Treat Rate in Gasoline	~300 ppmw	100,000 – 170,000 ppmw